This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1. (Currently Amended) A method for propagating data over a network, comprising:

   determining a sequential first set of network addresses;

   mapping a range of addresses in the sequential first set of network addresses to a second set of addresses wherein the second set of addresses is a one to one mapping of the range of addresses in the first set and wherein the addresses in the second set are not in increasing address order;

   traversing the second set of addresses to find another element of the network;

   transferring the data to the another element of the network along with an indication of at least a portion of the addresses remaining in the second set by specifying a range of addresses in the second set of addresses, wherein traversed addresses of the second set of addresses are excluded from the specified range of addresses.

2. (Original) The method as recited in claim 1 wherein the mapping is a function based on a primitive element.

3. (Original) The method as recited in claim 1 traversing the second set of addresses to find a second element of the computer network and transferring the data to the second element of the computer network and an indication of at least a second portion of the addresses remaining in the second set that have not been traversed.

4. (Original) The method as recited in claim 1 wherein the indication of the at least a portion of the addresses remaining comprises a function used to perform that mapping.

5. (Original) The method as recited in claim 1 wherein the network comprises Internet Protocol addresses.

6. (Original) The method as recited in claim 5 wherein the network is coupled to the Internet.

7. (Original) The method as recited in claim 5 wherein the network comprises a subnet.

8. (Original) The method as recited in claim 1 wherein the element of the computer network comprises a computing device.

9. (Currently Amended) A system for propagating data over a network, comprising:

A̶ a̲ processor;

A̶ a̲ memory device in communication with the processor and storing a sequential first set of network addresses;

A̶ a̲ set of computer readable instructions̲ i̶n̶s̶t̶r̶u̶c̶t̶i̶o̶n̶ stored on the̲ [[a]] memory device t̶h̶a̶t̶ ̶i̶s̶ ̶i̶n̶ ̶c̶o̶m̶m̶u̶n̶i̶c̶a̶t̶i̶o̶n̶ ̶w̶i̶t̶h̶ ̶t̶h̶e̶ ̶p̶r̶o̶c̶e̶s̶s̶o̶r̶ for carrying out a mapping of a range of addresses in the sequential first set of network addresses̲ a̶d̶d̶r̶e̶s̶s̶ to a second set of addresses wherein the second set of addresses is a one to one mapping of the range of addresses in the first set and wherein the addresses in the second set are not in increasing address order;

A̶ a̲ set of computer readable instructions stored on the̲ [[a]] memory device i̶n̶ c̶o̶m̶m̶u̶n̶i̶c̶a̶t̶i̶o̶n̶ ̶w̶i̶t̶h̶ ̶t̶h̶e̶ ̶p̶r̶o̶c̶e̶s̶s̶o̶r̶ for carrying out a traversing of the second set of addresses to find another element of the network; and̲

A̶ a̲ set of computer readable instructions stored on the̲ [[a]] memory device i̶n̶ c̶o̶m̶m̶u̶n̶i̶c̶a̶t̶i̶o̶n̶ ̶w̶i̶t̶h̶ ̶t̶h̶e̶ ̶p̶r̶o̶c̶e̶s̶s̶o̶r̶ for carrying out a retransferring of the data to the another element of the network along with an indication of at least a portion of the addresses remaining in the second set by specifying a range of addresses in the second set of addresses,̲ wherein traversed addresses of the second set of addresses are excluded from the specified range of addresses.

10. (Original) The system as recited in claim 9 wherein the mapping is a function based on a primitive element.

11. (Currently Amended) The system as recited in claim 9 comprising a set of computer readable instructions in communication with the̲ [[a]] memory device for carrying out a traversing of the second set of addresses to find a second element of the computer network and transferring the data to the second element of the computer network and an indication of at least a second portion of the addresses remaining in the second set that have not been traversed.

12. (Original) The system as recited in claim 9 wherein the indication of the at least a portion of the addresses remaining comprises a function used to perform that mapping.

13. (Original) The system as recited in claim 9 wherein the network comprises Internet Protocol addresses.

14. (Original) The system as recited in claim 13 wherein the network is coupled to the Internet.

15. (Original) The system as recited in claim 13 wherein the network comprises a subnet.

16. (Original) The system as recited in claim 9 wherein the element of the computer network comprises a computing device.

17. (Currently Amended) A computer-readable storage medium bearing computer readable instructions for propagating data over a network, comprising:

instructions for determining a sequential first set of network addresses;

instructions for mapping a range of addresses in the sequential first set of network address to a second set of addresses wherein the second set of addresses is a one to one mapping of the range of addresses in the first set and wherein the addresses in the second set are not in increasing address order;

instructions for traversing the second set of addresses to find another element of the network;

instructions for transferring the data to the another element of the network along with an indication of at least a portion of the addresses remaining in the second set by specifying a range of addresses in the second set of addresses, wherein traversed addresses of the second set of addresses are excluded from the specified range of addresses.

18. (Currently Amended) The computer-readable storage medium as recited in claim 17 wherein the mapping is a function based on a primitive element.

19. (Currently Amended) The computer-readable medium storage as recited in claim 17 comprising instructions for traversing the second set of addresses to find a second element of the computer network and transferring the data to the second element of the computer

network and an indication of at least a second portion of the addresses remaining in the second set that have not been traversed.

20. (Currently Amended) The computer-readable <u>storage</u> medium as recited in claim 17 wherein the indication of the at least a portion of the addresses remaining comprises a function used to perform that mapping.

21. (Currently Amended) The computer-readable <u>storage</u> medium as recited in claim 17 wherein the network comprises Internet Protocol addresses.

22. (Currently Amended) The computer-readable <u>storage</u> medium as recited in claim 21 wherein the network is coupled to the Internet.

23. (Currently Amended) The computer-readable <u>storage</u> medium as recited in claim 21 wherein the network comprises a subnet.

24. (Currently Amended) The computer-readable <u>storage</u> medium as recited in claim 17 wherein the element of the computer network comprises a computing device.

25. (Currently Amended) A method for distributed computing propagation, comprising:

        (a) determining a sequential first set of network addresses;

        (b) mapping a range of addresses in the sequential first set of network <u>addresses</u> ~~address~~ to a second set of addresses wherein the second set of addresses is a one to one <u>pseudo-random</u> mapping of the range of addresses in the first set and wherein the addresses in the second set are not in increasing address order<u>, wherein the mapping is a function based on powers of a primitive element;</u>

        (c) traversing the second set of addresses to locate at least two other elements of the network;

        <u>(d) subdividing the addresses of the second set of addresses that were not traversed in act (c) into a plurality of portions, wherein addresses of the second set of addresses that were traversed in act (c) are excluded from the portions;</u>

        <u>(e)</u> ~~(d)~~ transferring a set of computer readable instructions to the at least two other elements of the network to carry out a distributed computing function; and

(f) (e) transferring an indication of each portion at least a portion of the addresses remaining in the second set by specifying a range of addresses in the each portion second set of addresses along with a set of computer-readable instructions for carrying out acts (a) through (e) (d) to a respective element of the at least two other elements.

26. (Cancelled)

27. (Original) The method as recited in claim 25 wherein the indication of the at least a portion of the addresses remaining comprises a function used to perform that mapping.

28. (Original) The method as recited in claim 1 wherein the network comprises Internet Protocol addresses.

29. (Currently Amended) The method as recited in claim 25 [[26]] wherein the network is coupled to the Internet.

30. (Currently Amended) The method as recited in claim 25 [[26]] wherein the network comprises a subnet.

31. (Original) The method as recited in claim 25 wherein the element of the computer network comprises a computing device.